What is claimed is:

1. A method of detecting a digital watermark in an image comprising the steps of:

providing at least one probability factor to select a plurality of detection blocks in a watermarked image; and

analyzing the selected detection blocks to locate watermark data.

2. The method according to claim 1, wherein the at least one probability factor comprises a minimum distance between at least two selected detection blocks.

3. The method according to claim 2, wherein the minimum distance comprises a minimum city-block distance between the at least two selected detection blocks.

4. The method according to claim 3, wherein the minimum distance comprises a minimum diagonal requirement between the at least two selected detection blocks.

5. The method according to claim 2, wherein the at least two selected detection blocks overlap.

6. The method according to claim 1, wherein the at least one probability factor comprises selecting a first subset of detection blocks and selecting a second subset of detection blocks.

7. The method according to claim 6, further comprising the step of requiring a relatively broader spacing of the first subset of detection blocks in the image in comparison to the second subset of detection blocks in the image.

8. The method according to claim 6, wherein said analyzing step comprises analyzing the first subset of detection blocks to detect the watermark data.

9. The method according to claim 8, wherein the watermark data comprises a synchronization or orientation signal.

10. The method according to claim 6, wherein said analyzing step comprises analyzing the first or second subset of detection blocks to recover the watermark data.

11. The method according to claim 10, wherein the watermark data comprises a message.

12. The method according to claim 6, wherein said analyzing step comprises analyzing the second subset of detection blocks to determine a translation value of an embedded watermark signal.

13. The method according to claim 1, wherein the at least one probability factor comprises a minimum variance separation between at least two of the plurality of selected detection blocks.

14. The method according to claim 1, wherein the at least one probability factor comprises a keep away zone near a border of the image.

15. The method according to claim 14, wherein a detection block is not selected if centered within the keep away zone.

16. The method according to claim 1, wherein the at least one probability factor comprises a probability of watermark detection based on a variance distribution.

17. The method according to claim 16, wherein the at least one probability factor further comprises a multivariable distribution.

18. The method according to claim 17, wherein the multivariable distribution comprises a distribution of variance and edginess.

19. The method according to claim 1, wherein the at least one probability factor comprises an edginess count.

20. The method according to claim 19, wherein the edginess count is determined by comparing a pixel to a horizontal neighbor pixel and to a vertical neighbor pixel.

21. The method according to claim 20, further comprising the step of creating a horizontal edge count map and a vertical edge count map.

22. The method according to claim 21, further comprising the step of combining the horizontal edge count map with the vertical edge count map to generate a second edge count map.

23. The method according to claim 22, further comprising the step of summing values within the second edge count map to generate a total edge count.

24. The method according to claim 23, wherein the total edge count is provided to select a detection block.

25. The method according to claim 1, wherein the at least one probability factor comprises an evaluation of detection blocks neighboring a preliminarily selected detection block.

26. The method according to claim 25, wherein the evaluation comprises comparing the neighboring detection blocks' variance to a threshold value.

27. The method according to claim 26, wherein the evaluation further comprises comparing the neighboring detection blocks' edginess to an edginess value.

28. The method according to claim 1, wherein the at least one probability factor is determined adaptively based on at least one of processor speed, available memory and processing time requirements.

29. The method according to claim 28, wherein the at least one probability factor comprises determining a number of blocks for the plurality of detection blocks.

30. The method according to claim 28, wherein the at least one probability factor comprises an amount of overlap between the plurality of detection blocks.

31. The method according to claim 1, wherein the at least one probability factor comprises variance in a region.

32. The method according to claim 31, wherein to select a detection block the variance in the detection block must be greater than a threshold variance, the threshold being dependent on image resolution.

33. The method according to claim 32, wherein to select a detection block the variance in the detection block must be greater than a threshold variance, the threshold being adaptively determined based on at least one of image resolution, image characteristics, processing speed, available memory and processing time.

34. The method according to claim 1, wherein the at least one probability factor comprises an edginess in a region.

35. The method according to claim 34, wherein to select a detection block the edginess in the detection block must be greater than a threshold edginess.

36. The method according to claim 34, wherein to select a detection block the edginess in the detection block must be greater than a threshold edginess, the threshold

being adaptively determined based on at least one of image resolution, image characteristics, processing speed, available memory and processing time.

37. The method according to claim 1, wherein the at least one probability factor comprises a probability of watermark detection based on a multivariable variance distribution.

38. The method according to claim 1, wherein the at least one probability factor comprises a region's color saturation.

39. The method according to claim 1, wherein the at least one probability factor comprises a combined metric between a region's color saturation and at least one of the region's variance and edginess.

40. A method for detecting a watermark in an image comprising the steps of:
    selecting a plurality of detection regions, wherein at least two of the selected detection regions overlap; and
    providing that the selected detection regions maintain a minimum distance from one another.

41. Apparatus to detect a digital watermark embedded within an image comprising:
    means for selecting a plurality of detection regions in the image according to at least one probability factor; and
    means for analyzing the selected detection regions to locate watermark data.

42. A method to select at least one region for detection of a watermark signal comprising the steps of:
    determining variance for each region in an image neighborhood;
    comparing the variance of each neighborhood region to a first threshold; and

selecting a central region in the neighborhood when the variance of at least some of the neighborhood regions is greater than the first threshold.

43. The method according to claim 42, further comprising the step of comparing an edginess value of each of the neighboring regions to a second threshold, wherein the central region is selected only when the variance of at least some of the neighboring regions is greater than the first threshold and when the edginess of at least some of the neighboring regions is greater than the second threshold.

44. A method of using probability factors to select detection blocks in an image, the detection block to be analyzed to detect a digital watermark embedded in the image, said method comprising the steps of:

requiring a minimum distance between any two selected detection blocks;

requiring a minimum variance separation between at least two of the selected detection blocks;

requiring a minimum border distance between at least one selected detection block and an image border; and

before selecting a detection block, requiring at least some of the detection block's neighboring blocks meet at least a minimum threshold variance requirement.